

R E P O R T R E S U M E S

ED 017 375

RC 002 316

WHAT PEOPLE CAN DO ABOUT RURAL CIVIL DEFENSE, NOTES FOR
SPEAKERS AND WRITERS.

DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

REPORT NUMBER PA-574

PUB DATE JUN 63

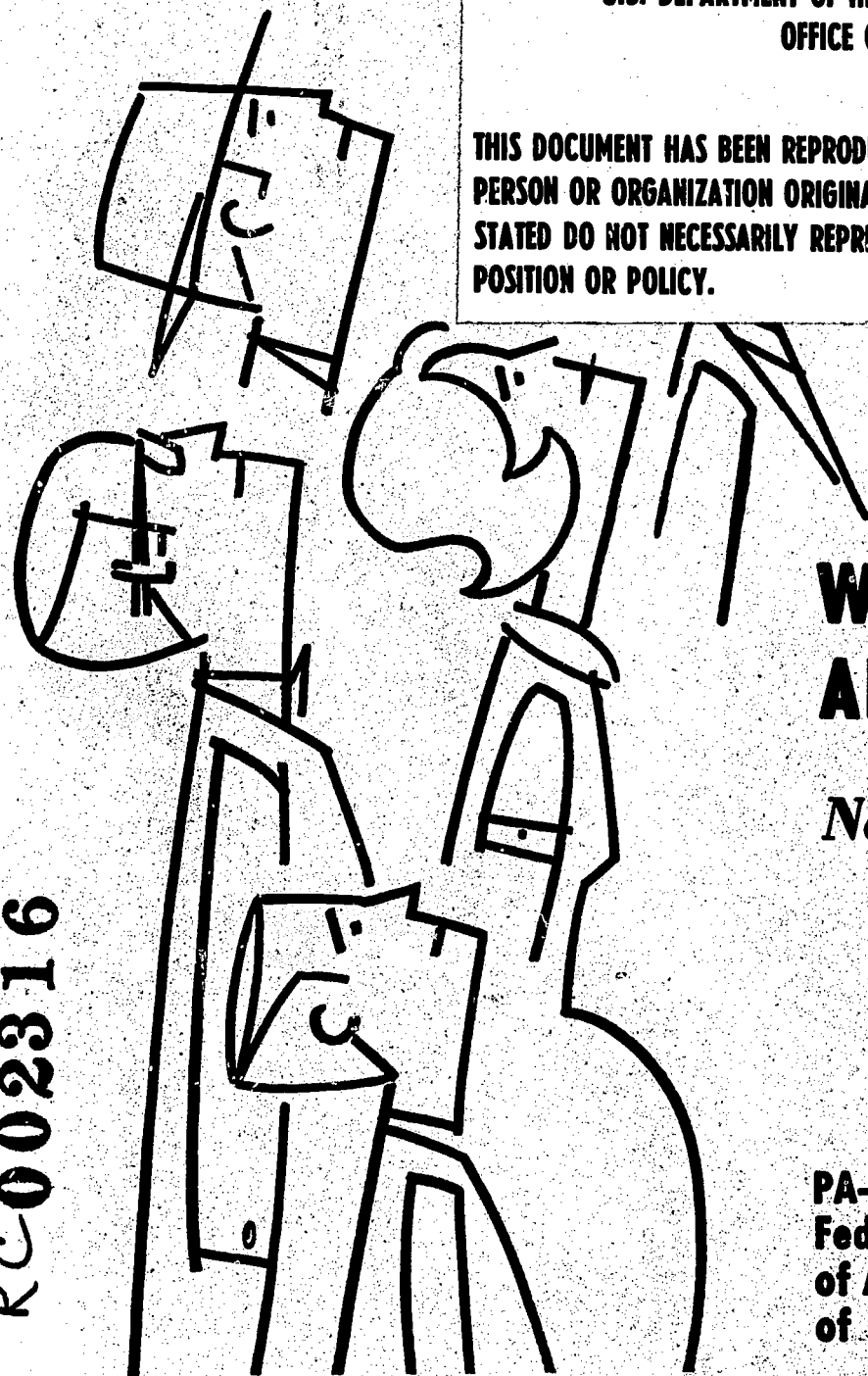
EDRS PRICE MF-\$0.25 HC-\$0.68 15P.

DESCRIPTORS- *CIVIL DEFENSE, COMMUNITY PROGRAMS, COMMUNITY
COOPERATION, EDUCATION, *FALLOUT SHELTERS, FOOD SERVICE,
FAMILY (SOCIOLOGICAL UNIT), FIRE PROTECTION, NEEDS,
RADIATION, *RURAL AREAS, RURAL FAMILY, SERVICES, WATER
RESOURCES,

CIVIL DEFENSE PREPAREDNESS IS A FACTOR RURAL PEOPLE NEED
TO CONSIDER IN ALL THEIR FARM, HOME, AND BUSINESS PLANNING.
NUCLEAR WEAPONS AND THE POSSIBILITY OF NUCLEAR ATTACK ARE
FACTS THAT AMERICANS CANNOT IGNORE. THIS DOCUMENT PRESENTS
THE BASIC ELEMENTS OF A CIVIL DEFENSE PROGRAM FOR PEOPLE IN
RURAL AREAS WHICH INCLUDE--(1) THE DANGERS OF FALLOUT,
RADIATION, AND THE BLAST, (2) THE VALUE OF FALLOUT SHELTERS,
(3) HOW TO STOCK AND PRESERVE FOOD IN ORDER TO AVOID
CONTAMINATION, (4) HOW TO PRESERVE THE WATER SUPPLY, (5) THE
VALUE OF A COMMUNITY WARNING SYSTEM AND COOPERATION, (6) HOW
TO PROTECT LIVESTOCK, FEED, AND CROPS, (7) HOW TO PREVENT
FIRES, AND (8) THE VALUE OF A FAMILY SURVIVAL PLAN. A LIST OF
KEY GOVERNMENT PUBLICATIONS PERTAINING TO CIVIL DEFENSE IS
INCLUDED. (ES)

ED017375

RC002316



**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION**

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

WHAT PEOPLE CAN DO ABOUT RURAL CIVIL DEFENSE

Notes for Speakers and Writers

**PA-574
Federal Extension Service, U.S. Department
of Agriculture, in cooperation with the Office
of Civil Defense, Department of Defense.**

CONTENTS

	Page
• Know the Dangers.....	3
• Why Rural Preparedness.....	4
• The Needs Have Changed.....	5
• Shelter Is a Must.....	6
• Family Food Reserves.....	8
• Family Water Supply.....	9
• In Your Community.....	10
• Livestock, Feed, Crops.....	11
• Rural Fire Prevention.....	12
• Make a Family Survival Plan.....	13
• Some Key Publications.....	14
• Rural Civil Defense Education and Information Program.....	14

WHAT PEOPLE CAN DO

ABOUT RURAL CIVIL DEFENSE

Notes for Teachers and Parents

Prepared by the U.S. Department of Agriculture, in cooperation with the Office of Civil Defense, Department of Defense.

ED0171003

216800

KNOW THE DANGERS

As they plan their future operations, rural people need to know the dangers they face in case of a possible nuclear attack. Few families in rural areas are likely to be hit by bombs, but all are vulnerable to radioactive fallout.

The Blast

The nuclear bombs that do fall would cause severe destruction to buildings in a 6 to 10 mile or larger area depending on the megaton power of the bomb. The heat from the bomb might set fire to easy-to-burn material as far away as 25 miles.

When the bomb explodes close to the ground it lifts earth and other material into the mushroom cloud that goes high into the air. The heat from the bomb pulverizes and melts this material and it mixes with the radioactive particles that come from the bomb.

What Fallout Is

The mixture of pulverized earth and radioactive bomb material falls back to the earth in the form of fine particles. That is fallout.

It takes time for fallout to drop, even close to where a bomb bursts. It would likely be 30 minutes before fallout starts just outside the devastated bomb area. Fallout is blown by the winds. The most immediate and serious fallout danger would come from early fallout—those fallout particles which return to the earth within the first 24 hours after a bomb burst. Any area might be susceptible to fallout from a number of bombs, and from dust that was blown great distances in the upper atmosphere. The main danger from fresh fallout is gamma rays.

What Radiation Does

Gamma rays are like X-rays and can penetrate deep into most materials, including your body. When they do, they can damage or destroy living cells. If enough cells are injured, people (or animals) sicken, perhaps die.

But most gamma rays entering a thick layer of dense materials (such as 36" of earth) are absorbed before they reach the other side. That is why you can protect yourself by staying in a shelter that provides enough thickness of shielding materials to absorb the gamma radiation; and why your livestock would be safer under the thickest cover you can provide for them.

The beta rays in fallout cannot penetrate very far. Ordinary clothing, a tarpaulin or any covering that keeps out dust will keep them out. If fallout gets on your skin or in your hair (or on animals) and is not washed off or otherwise removed, it might cause skin damage.

Fallout contains radioactive materials but the radiation from fallout does not make anything else radioactive. If you became ill from radiation exposure, no one else could catch radiation sickness from you—it is not contagious.

Fallout radiation rays passing through food, feed or water would not make them radioactive; and would not make them dangerous to eat or drink. It is only when radioactive fallout particles get into food supplies that food could become unsuitable for use. If you consume contaminated food or water, and enough radioactive particles get inside your body, they could cause you internal injury. Therefore, fallout should be kept out of food, feed, and water. Keep them under cover.

If fallout dust gets on or mixes into food supplies, it may be necessary to decontaminate them before they are eaten.

Danger Drops Rapidly

The first two days of fallout are most dangerous. This is the time shelter is most vital. If fallout is light or moderate, after 2 or 3 days you might be able to come out of shelter, at least for part of each day. But you will be safer to have a two weeks' protected food and water supply on hand for yourself and family (and livestock) in case you are in one of the heavier fallout areas.

Detecting Fallout

After an enemy attack you might not know whether there is or is not any fallout in your area unless you hear about it on your radio. Sometimes, if there is heavy fallout, it is visible in the air or on smooth surfaces. It might look like ordinary dust or dirt. It may also be invisible and detected only with special monitoring equipment. You cannot smell or taste fallout and cannot feel the radiation from it.

If you should see particles of dust falling after an attack, assume that they are radioactive fallout. Don't take chances—take shelter.

WHY RURAL PREPAREDNESS

We the American people are strong because we have planned it that way and have worked to make our plans a reality. Our strength lies in our factories, on our farms and in our homes, schools, churches, businesses and other organizations as well as in our armed forces.

Work for Peace

While our country does everything possible to avoid war and to work for peace, we do have to prepare for the possibility of an enemy nuclear attack, as well as for other emergencies. Preparedness in rural areas is as essential to our country's strength and survival as preparedness on other fronts.

Preparedness by rural people is one of their best ways to work for peace. A prepared country is a strong country, less likely to be attacked.

Insure Family Survival

Fallout from the bombs would be the big danger in rural areas; rural people can protect themselves from fallout, live and recover.

Assure Continued Food

Following any attack it would be essential that farmers and other rural people survive, save breeding stock, decontaminate and continue basic food production that would be vital to the country's survival and recovery.

Protect Your Business

In the nuclear, cold war age preparedness for fallout protection is simply another factor rural people need to consider in their total farm, home and business planning.

Be a Good Citizen

Whenever the freedom and way of life we love has been threatened Americans have planned and fought to save it for themselves and their children. As American citizens,

the situation now demands the best preparedness we can make for the total defense that would be necessary to survive a total war.

THE NEEDS HAVE CHANGED

Many times people ask—"Why do civil defense officials keep changing their minds about what people should do to protect themselves in the event of a nuclear attack?"

Policy changes were necessary because of radical changes in the size and types of weapons, changing the amount of warning time we would have.

The Blockbuster

In World War II, the civilian defense program, as it was called at that time, was designed for protection from conventional bombs, and the policies were based upon relatively slow moving planes attacking with blockbuster-type bombs. During attacks in England and Europe, civilians usually went into makeshift shelters for protection from blast and falling debris, while helmeted air raid wardens put out fires and sounded ALL CLEAR when the danger had passed. At that time raids on the continental United States were not impossible, but because of ocean barriers and the limited ranges of bomber planes and submarines, obviously any raids on us would be isolated and small in their impact.

Duck and Cover

When the first small A-bombs were invented, the civil defense instruction was simply to get under cover. An illustrated pamphlet called DUCK AND COVER sold millions of copies in the early 1950's. At that time there was no radar detection system and America could only expect about 15 minutes warning time if bomber planes attacked. Radioactive fallout was practically unknown and almost any hiding place would provide some shelter.

Evacuation

But A-bombs were soon outdated by H-bombs, and we had evidence that Soviet Russia also produced such weapons and could deliver them. Our large cities were considered prime targets for enemy attack and with the powerful, destructive, radioactive H-bombs, it was evident that the best thing for people was "not to be there." So a civil defense policy of evacuation was developed. This provided that people should move out of the cities and go into safer rural reception areas.

During this phase of civil defense, H-bombs still had to be delivered by manned bombers, which could be detected by radar hours before they could arrive within striking distance. We installed powerful radar detection systems that could provide from 4 to 6 hours of warning time. This made plausible a policy of evacuation after warning of expected attack. Federal, State and local governments developed "Operational Survival Plans" in which evacuation was considered the principal answer to thermonuclear attack. These plans also took into consideration radiological defense.

If time was short, people were to go to the best available shelter.

Fallout Shelters

Now we are in an era of intercontinental ballistic missiles (ICBMs). These travel at such incredible speed that they can arrive on target minutes after being detected by radar systems. Estimated warning time dropped to about half an hour or less. Obviously major

reliance on evacuation was no longer feasible, and in 1962 the Office of Civil Defense, Department of Defense, recommended that first priority in State and local survival planning be given to shelters or, lacking shelters, to taking the best cover available.

New ICBM sites are being scattered throughout the United States. While no one knows what an enemy's targets might be, these sites are militarily meaningful. Weapons used against these new ICBM sites are likely to be surface bursts, and would produce great quantities of fallout. This could endanger areas many miles away.

This is a major reason for today's civil defense policies and for the public and private fallout shelter programs upon which our government and our people are working.

SHELTER IS A MUST

In any fallout protection plan, shelter is a must. You may be too far from a community shelter to use it. The first essential is to protect or shield your family and livestock from fallout, and from the penetrating rays that radiate from fallout. You need a shelter that will keep out dust. It must have thick enough walls and top to shield you from the rays.

Any farm or home buildings would give some protection. And in all buildings there are some locations that provide better shielding than others. You can pick the best buildings and the best locations in each building, then add more shielding protection to them. Or you can build new shelter areas. It often is easy to build increased protection into root cellars, storm cellars, basements and other buildings.

Shielding From What?

The first essential is to know what you are shielding against. Nuclear explosions create radioactive fallout dust which winds can carry to any part of the country. The primary aim of your fallout shelter is to shield you from gamma rays that radiate from the fresh fallout.

The thicker the wall between you and the fallout and the heavier the wall material, the better it absorbs and reduces the radiation.

You might not be able to see the fine fallout, but the gamma rays from it can go through walls and roofs, and through our bodies if we are not protected from it. The body can absorb and recover from some exposure to gamma radiation, but heavy exposure over a brief period can cause sickness and death. This is why fallout shelter is essential.

Your Best Safeguards

Shielding, distance and time are your three best safeguards from the fallout. The further you are from the fallout the less exposure you get. The longer it takes fallout to reach your area the more radiation is cut by decay.

Hence, the most dangerous period is the first two days, but it might be one or two weeks before you should leave shelter for any length of time. You will need a battery operated radio to listen for civil defense warnings and get instructions as to when you can safely go outside.

Improving Shelter You Have

Some of your buildings and certain locations in buildings will give more protection than others. Generally you are safer in a basement because there is no radiation from

below ground and you would only get radiation from above. Above ground, thick walls and roof would give more shielding than thin ones. You'd generally be safer in the center of a large building because you would be further away from the fallout.

If you and your livestock stay outside in the fallout you would be subject to the full intensity of the radiation. But if you were in the first floor of a frame house you probably would be protected from about half the radiation, while in a below-ground basement you would get only about 1/10th the exposure you would get outside.

With a little work, you could improve your basement shelter protection by adding more thickness of walls and ceiling, using concrete, brick, earth or other material (leaving small spaces open for ventilation). Such a shelter would need a "baffle entrance"—that is, a thick wall that you had to walk around to get through the doorway. This will reduce radiation through the entrance.

If you had an underground shelter covered with 3 feet of earth and had a baffle entrance that reduced radiation through the doorway, you would get only about 1/3000th, a very little, of the radiation outside. Such a shelter requires ventilation, and it is generally estimated that the shelter should provide at least 10 square feet of floor space for each person.

If your livestock were in a large, two-story, gambrel-roof barn, built of concrete blocks with no windows and few doors, and second story full of baled hay, they might get only about 1/10th of the radiation they would get outside.

If they were in a medium-size, wooden frame barn with a low foundation and an empty hay loft, they would likely get about half as much radiation as they would outside.

Shielding Materials

When you have picked your best shelter areas you can make them safer by putting more concrete, earth, hay or other shielding materials around and on top of them.

The heavier and more dense the material the less it takes and the better it is. Generally, you need more shielding on the sides than you need on the top of the shelter because of radiation from the fallout that settles on the larger area of ground around the building.

The shielding value of the different shielding materials—concrete, dirt, wood, hay, etc.—will depend largely on their weight per cubic foot, or mass density. Dirt weighs about 100 pounds per cubic foot and would give nearly three times as much protection as wood, which weighs about 38 pounds per cubic foot.

A cubic foot of baled hay weighs about 15 pounds while a cubic foot of reinforced concrete, brick, sand or gravel weighs between 100 and 150 pounds and would provide protection in that ratio.

If you wanted to build an above ground family shelter which would reduce the radiation dose to 100 times less than if there were no protection, (the minimum protection for a family shelter recommended by the Federal Government), you would need about 18 inches of reinforced concrete on the sides of the shelter and about 12 inches on top. To do the same job you would need about 2¼ feet of earth on the sides and 18 inches on top, or about 5 feet of wood material on the sides and 4 feet on the top. Other materials would shield in proportion to their weight per cubic foot.

Make a Shelter Plan

Everyone needs to plan now what they would do in case of an attack. In most rural areas people need both a family and a livestock shelter plan. You can select the best shelter areas you have and improve their shielding quality or build special shelters. Re-

member that you are protecting from the deadly gamma rays that radiate from fallout! Even with the advantages of time and distance, you need a shield—mass of material—between your family (and your livestock) and the fallout. You can get more detailed information and shelter plans from county Extension agents and civil defense offices.

FAMILY FOOD RESERVES

In time of trouble, food is much more than nourishment. It can calm upset and troubled persons, and have morale effects that are equal to or exceed its nutritional benefits.

This is true in any kind of a disaster, natural or war-caused. Therefore, in thinking of your defense preparations, your food plans are of utmost importance.

Store 2-Weeks' Supply

Some families are increasing their regular food supplies, so they will always have a 2-weeks' supply ahead. They replace items as the food is used. If you follow this plan, you will want to place your fresh supplies at the back of your stockpile, and use the older items first, to keep your reserves fresh. Some families prefer to store and maintain a special 2-weeks' supply of food, in or near their family shelter area. You might want to combine both plans. Your decisions will be based on your own family wishes and situation. The important point is to have enough food on hand to last through an emergency of 2 weeks or more, until it is possible to get more.

Foods That Keep

Choose foods that last for weeks or months without refrigeration. Keep canned and jar foods in a dry place where temperatures are preferably not over 70° and not under freezing. Put packaged and dried foods into metal or glass containers to prevent insect or rodent damage.

Your selections should provide a reasonably well-balanced diet. Canned fruits, vegetables, main dishes, juices and soups—evaporated and nonfat dry milk—cereals, canned breads, boxed crackers and instant beverages such as coffee or tea might all be included on this list.

You will of course consider your family's individual preferences and habits. During a time of stress, they will want simple and familiar foods. In an emergency, there is emotional stress, often loss of appetite, and people want plain, everyday foods they're already used to. Even variety is secondary.

If you have infants, or sick or aged, their needs will require attention; special kinds of milk, and strained, chopped or other prepared foods for babies, toddlers, elderly persons, diabetics or others on limited diets.

Foods should require little or no cooking, as your gas or electricity might be cut off. Any open fire uses up oxygen, gives off heat, and can produce dangerous carbon monoxide. But you could use candles or canned heat in a shelter if you have adequate ventilation.

It is well to select jars and cans of a size to meet your family's needs, for just one meal at a time. This is especially desirable for meat, fish, poultry, vegetables, evaporated milk and other foods that spoil fast after a container is opened.

Cooking and Serving Food

For emergency eating, you will need certain minimum equipment, such as:

A small compact cooking unit (perhaps like campers use).

One or two cooking utensils.

Can and bottle openers.

Measuring cup.

Paring or pocket knife.

Matches

Disposable knives, forks, spoons.

Paper plates, cups, towels, napkins.

Special items for elderly or ill.

Nursing bottles, nipples, if baby to feed.

If disposable items are used, you will of course estimate the number needed for 2 weeks. You may prefer plastic dishes, cups, forks, spoons and knives, as they take up less space. But water may be too scarce for washing them.

Radioactive Contamination

Fallout radiation passing through either food or water does not make it radioactive, and does not create danger in eating or drinking. It is only when you consume food or drink containing radioactive dust or particles—and these elements get into your body—that they can cause internal injury or illness. Actually, the danger from swallowing radioactive material is far less than the danger from external exposure to gamma radiation. By keeping necessary food and water covered and stored in easily accessible places—and preparing yourselves a shelter area with enough thickness of ceiling and walls to keep radiation from harming you—you are providing yourselves the best kind of survival insurance. It won't hurt you to have it and not need it; but it might hurt you to need it and not have it.

FAMILY WATER SUPPLY

Water is of utmost importance in emergency planning. Humans and animals can live longer without food than without water.

Fallout from a nuclear attack could contaminate water from unprotected sources, and make it undesirable to use. Your water supply system might be out of operation. It might also be unsafe for you to leave the shelter to go get water.

You do not want to drink heavily contaminated water because radioactive material taken into your body can give off rays that damage living tissue.

Emergency Water Needs

The safe thing to do is store at least 4 gallons of water for each member of the family. It would be far better to have more for each person, to allow for bathing, brushing teeth and washing utensils.

Water from your normal safe supply source can be stored in well cleaned, covered, plastic or other non-corrosive containers. Unbreakable containers are best.

Most people will prefer to check their stored water supply every few months, to be sure containers are not leaking and that taste and appearance are all right. If the water looks good, tastes good and smells good, there is no need to change it.

Other Household Sources

There are other sources of safe drinking water in your household water system—in the pipes, pressure or storage tanks, water heaters and flush tanks of toilets. Refrigerators and

freezers will provide safe ice cubes (even accumulations of frost) that can be melted and used.

Properly sealed and covered wells would be usable, if there is a means for getting the water out of the well in case of power failure. Also water from covered (tested and approved) springs can be used.

In emergency, turn off the gas or electricity at your water heater; and your local authorities may direct you to close the main water valve to prevent outside contaminated water from getting in.

Water for Livestock

A reserve supply of water is essential in livestock shelter planning. It should be protected from fallout.

After a Nuclear Attack

Following a nuclear attack, water from unprotected sources, such as streams, lakes, ponds, uncovered wells or springs and cisterns might be contaminated with fallout. This water should not be used until civil defense, public health or other radiological monitoring services have found it to be safe.

If water is contaminated, a small amount of the radioactivity would be dissolved, but most of it would be in the form of suspended materials. These would settle and be taken up by clay and mud on the bottom. This process could be hastened by stirring up the mud, or adding clean soil which would pick up and hold the radioactive dust as it settles. This could be done in an extreme emergency. After the water has cleared it should be carefully strained through a filter pad or several thicknesses of fine cloth or paper towels. Another method which could be used for very small amounts of water would be to put it through one of the household gadgets that soften water for use in steam irons. This would remove most of the radioactivity from clear water.

Obviously you would not want to run risks if you could avoid them, so everyone will be better off to have enough stored and protected water to carry through in an emergency.

Water that has harmful bacteria in it can be purified by boiling, using chlorine or iodine tablets or other purification methods, but these methods will not remove radioactive material from the water.

IN YOUR COMMUNITY

Fallout protection preparedness is both a family and community job, all working together. A good family plan has to be based on the local community plan: monitoring and warning systems, school and other community shelter plans.

Each family needs to understand, cooperate with and help develop the community plans.

Warning System

In case of an attack you would have to depend on local civil defense and government officials to keep you informed. You need to know the warning system, and monitoring plans, for keeping tab on fallout and telling you when it is safe to leave shelter as well as advising on decontamination and other recovery actions. You need to know, and maybe help plan, how you and others will get the warning.

Community Shelters

Many, even small, communities will have community shelters, including school and hospital shelters. You need to know what the plans are, how you would use a shelter in an emergency, and help the community make further needed plans.

Training

In many communities, local civil defense, school, public health, Red Cross and other officials are giving civil defense, medical self-help, first aid and other training courses. You can see that someone in your family takes such training. You can tell others about it, and you and your neighbors can ask for the further type of training you feel you need.

You can get civil defense publications from your civil defense office or county Extension agent's office. You can study them, and talk them over with your neighbors and with the officials. You can be a local leader who helps bring about the community understanding that is needed.

Other Services

In case of an attack your community would be deeply concerned about fire protection, food management, how you would get necessary supplies for production, and how other vital government services would be continued. These are all part of good community civil defense planning. As a part of the community you need to know about the plans, help decide whether or not they are adequate and do your part in helping make them work to the protection and good of all.

LIVESTOCK, FEED AND CROPS

Farm animals have about the same sensitivity to radiation as people. To give them the same chance to survive, they would need the same quality of shelter as people. But this may not be feasible. It is worthwhile, however, to take advantage of any protection already on your farm.

Livestock Shelter

Provide places of shelter for your farm animals and poultry. A number of farm facilities can be adapted to serve as some kind of shelter. For example, trench silos can be converted to livestock shelters by constructing roofs over them and covering the roofs with earth.

Livestock housed in barns and other farm buildings during fallout stand a better chance of surviving the effects of radiation than those that are not sheltered. A reasonably well-built shelter prevents fallout from settling on the animals, keeps the animals from eating contaminated feed and reduces the radiation they would be exposed to outdoors.

Once fallout occurs, you should not attempt to protect livestock unless local civil defense authorities tell you that it is safe to do so.

Give milking cows the most protected places in the shelters; this is for the protection of both cows and milkers. If you can, milk the cows before fallout begins. Put cows and suckling calves together; the calves can suckle and reduce the discomfort of full udders. Give your most valuable breeding stock the next most protected places in the shelters; give other animals the shelter that remains.

Store or locate protection equipment conveniently—fire extinguisher, broom, water hose, sprayer, tractor with scraper or plow—where it will be ready for use.

To Protect Feed

To protect feed, place a cover over it. Fallout is like dust; a cover will prevent it from coming in contact or mixing with the feed.

Grain stored in a permanent bin, and ensilage in a covered silo, are provided with adequate protection; they can be used as soon as it is safe for you to get to them following fallout.

A haystack in the open field can be protected with a tarpaulin or similar covering. The fallout will lodge on the tarpaulin and can be removed with it. The hay could be used immediately.

Many unprotected materials, such as uncovered haystacks and piles of farm produce, may be safely used as food and feed if the contaminated outer parts are removed.

Water Supplies

Water from normally safe sources, such as approved and covered springs and properly constructed and sealed wells, usually is free from contamination even in heavy fallout areas; it should be safe for use by man and animals. Surface water in rivers, ponds and lakes will be contaminated and should not be used until checked and approved. But, if the choice is between contaminated water or serious thirst, it is better to allow the animals to drink.

An adequate supply of water is essential in livestock shelters.

When You Can Use Pasture

In case of heavy fallout use pasture only as the last resort as a source of feed to prevent starvation of the animal.

If the fallout is light delay pasturing until it has been announced the area is safe for this purpose, or as the last available means to provide the feed requirements of the animal.

Reclaiming Cropland

In areas where fallout is serious enough to cause people to take shelter, delay reclaiming of cropland and pasture until damage assessment can be made and recommended procedures are determined. These recommended practices will depend on the intensity of the fallout in relation to other areas and availability of suitable cropland to meet the expected needs. Treatment for the different crops and soils varies. It is therefore not advisable to make any general recommendation until after personnel trained in soil and radiological work have made an appraisal.

RURAL FIRE PREVENTION

Fighting fire requires organization at all levels—national, State, county, community and family.

The Forest Service of U.S. Department of Agriculture is responsible for development of plans, in cooperation with Federal, State and local agencies, for coordinated programs of rural fire defense in event of an enemy attack.

At the State and local level, the governor is responsible for rural fire defense. Through his State organization, which includes the Director of Civil Defense and State Rural Fire Defense, he assists local fire protection agencies in planning, organizing, equipping, and coordinating rural fire defense activities.

Clean up now in and around the buildings. This involves removing fire hazards from attics, closets, storage rooms, basement and garage. The area around the house, fuel tanks, and outbuildings should be kept free of grass, weeds, and debris. Herbicides may be used around key installations to kill vegetation.

Have firefighting tools and equipment such as extinguisher, shovel, rake, water bucket, and ax handy and in good condition.

Have an adequate, easily accessible, "on-farm" water supply such as irrigation ditch, water tanks, cisterns, or a pond. For farms with a water pressure system it would be good protection to have 50 or more feet of garden hose to use in case of fire. Lightweight portable pumps and hose should be considered as special equipment for local teams.

Have all-weather farm lane kept clear so that fire equipment and other vehicles can move freely and easily.

Have a good communications system for prompt reporting of fires.

Prepare and maintain firebreaks or plowed firelines through the farm and woodlands, to stop the spread of fire.

Organize each family and neighborhood into a firefighting team, each member with specific duties and developed "know-how" for emergencies.

Organized fire protection is vital to rural areas in peace or war. Residents in areas without this protection should consult the State Forester or Fire Marshal about setting up a rural fire defense.

MAKE A FAMILY SURVIVAL PLAN

Your family could survive the fallout from a nuclear attack if your plans are carefully made and worked out.

A good farmer, homemaker or businessman will set goals and plan ahead to meet problems and make the best of each opportunity. You buy fire, accident and other insurance and hope you don't need it.

Survival insurance in case of an attack is no different. You plan now so that you would have shelter from the fallout radiation, have reserve food, water and feed, a battery radio handy, and know what you would do. You would not have time to plan after an attack.

The plans you make now could make the difference to your family and your country's preparedness. The ability to continue food production would be most important. Such planning would also help you meet storm, flood and other emergencies. And, you can plan to make other good uses of the shelter area.

Your Family Plan

The kind of shelter and family plan you have is something you and the family have to decide. Of first importance is an understanding of what fallout is, what the danger is. It is clear that you will need some kind of shelter and the walls and top need to be heavy enough to shield your family from the deadly rays from the fallout. Just as in other farm, home and business planning you need to get the facts and decide on your most practical alternatives.

Your county Extension agents, in cooperation with civil defense and other agencies and local people, are stressing a rural fallout protection program aimed at helping rural people get and understand the facts. It is aimed at helping each rural family make the family preparedness and survival plan that best fits their family needs and situation.

Your Farm Supplement

Along with each farm family plan there needs to be a plan for the best possible protection of key livestock and farm production essentials. Livestock can survive fallout just as humans can. The better the shelter they have, the better chance they have. You can also plan for the reserves of food and water they would need. Deciding on fallout protection and what you would do in case of an attack, is just another factor in good farm management planning. The same people who help you with your other planning, including county Extension agents, will have publications and other facts that will help you make a farm fallout protection plan.

SOME KEY PUBLICATIONS

Many of the needed facts are available in publications and other material which can be obtained from Extension agents, State Extension Services, and State and local Civil Defense officials.

Those now available in supply for the public include:

- *Radioactive Fallout on the Farm*, USDA, FB 2107, to give a general awareness and facts.
- *Family Food Stockpile for Survival*, USDA Home and Garden Bulletin 77. Recommended. 2-week food supply, meal plans, cooking equipment, water sources, etc.
- Four USDA program aid leaflets:
 - Soils, Crops and Fallout*, PA-514
 - Fallout and Your Farm Food*, PA-515
 - Your Livestock Can Survive Fallout*, PA-516
 - Rural Fire Defense, You Can Survive*, PA-517
- *Fallout Protection—What To Know and Do About Nuclear Attack*, OCD, H-6. Covers basic facts, building and family shelters, shelter supplies, emergency housekeeping.
- *Family Shelter Designs*, OCD, H-7, working plans for eight family shelters.

RURAL CIVIL DEFENSE EDUCATION AND INFORMATION PROGRAM

Increased Shelter Protection for Rural Families

Nuclear weapons and the possibility of nuclear attack are facts that Americans cannot ignore. The possibility of such a total war attack demands total preparedness.

Over 67 million people live in rural areas, including towns of 10,000. Generally they do not live near enough to have access to the group shelters the Office of Civil Defense is stocking with survival items.

Radioactive fallout is the big danger in rural areas. But rural people are not generally aware of the dangers or that they could survive a possible attack. The educational challenge is to create awareness. Then help rural people understand the facts and practical steps they need to take as part of their total farm, home and business planning.

All agencies and groups that serve and do business with rural people need to help with this educational job.

The Extension Assignment

In addition to the educational and emergency help rural people and State and local governments normally expect from extension agents, the Cooperative Extension Service has a special national rural civil defense assignment.

President Kennedy has called on the Department of Agriculture to "inform rural people of their role in an emergency and to give them educational assistance in reducing vulnerability to their homes, crops and livestock."

Secretary of Agriculture Freeman has called on the Cooperative Extension Service, as the educational arm of the Department, to lead and coordinate an all-out information and education program to inform rural people of the needs and give them the facts necessary to survive possible attack and continue vital food production. The Department of Defense is cooperating in providing the needed educational material.

Educational Approach

The accent will be on helping rural people:

- (a) become aware of the need for preparedness.
- (b) learn that they could survive.
- (c) understand fundamentals of survival.
- (d) get the facts and practical considerations they need to make their own family and farm survival plans.

The approach will be an educational one that stresses civil defense preparedness as another factor rural people need to consider in all their farm, home and business planning.

Educational program leaders in rural civil defense have been named on each State Extension staff. They will help the total Extension staff make rural preparedness a part of their regular education work. Special efforts are underway to better train county Extension agents and supply them with publications and information rural people need.

They seek the cooperation and support of organizations serving in the rural community—farm, civic, business, cooperatives and other organizations. They will, in close cooperation with local leaders, help committees organize for action, work with organizations reaching rural people, mass media and others to spread the needed information. They will provide families with planning outlines and localized facts they need to make their own preparedness plans.

Close cooperation is maintained with local government, the civil defense director and the civil defense organization, for a total approach to civil defense.

Cooperative Extension Work: United States Department of Agriculture and
State Land-Grant Colleges and Universities Cooperating.

Issued June, 1963

Published in Cooperation with the Office of Civil Defense, Department of
Defense.